

WHAT IS CLAIMED IS:

1 1. A method for screening for a modulator of cell proliferation,
2 comprising:
3 (a) contacting a population of cells that comprise a recombinant construct
4 encoding CCX chemokine receptor (CCX CKR) with a test agent; and
5 (b) determining the effect of the test agent on proliferation of the cell
6 population.

1 2. The method of claim 1, wherein contacting is done in the absence of a
2 ligand that modulates CCX CKR activity.

1 3. The method of claim 2, wherein determining comprises counting the
2 number of cells in the cell population using a hemacytometer at a plurality of time points.

1 4. The method of claim 2, wherein determining comprises conducting an
2 assay that measures the metabolic activity of the population of cells.

1 5. The method of claim 2, wherein determining comprises conducting an
2 assay that measures DNA replication in the population of cells.

1 6. The method of claim 2, wherein determining comprises conducting an
2 assay that measures the concentration of a cell cycle antigen in the population of cells,
3 wherein the antigen is specific to proliferating cells.

1 7. The method of claim 2, wherein determining comprises comparing a
2 measure of the proliferation of the cell population with a measure of proliferation of a control
3 population of cells.

1 8. The method of claim 1, wherein the agent is an antibody.

1 9. A method for screening for a modulator of an activity of CCX
2 chemokine receptor (CCX CKR), comprising:
3 (a) contacting a cell comprising a recombinant construct encoding CCX
4 CKR with a test agent in the absence of a ligand that specifically binds CCX CKR; and
5 (b) determining the effect of the test agent on the CCX CKR activity.

- 1 10. A method for stimulating cell growth comprising activating the
2 expression and/or activity of CCX CKR in a cell.
- 1 11. The method of claim 10, wherein activation comprises introducing a
2 nucleic acid construct encoding CCX CKR into the cell, whereby expression of CCX CKR in
3 the cell is increased.
- 1 12. The method of claim 10, wherein activating is done in the absence of a
2 ligand that specifically binds CCX CKR.
- 1 13. The method of claim 10, wherein the method is conducted in vitro.
- 1 14. The method of claim 10, wherein the method is conducted ex vivo.
- 1 15. The method of claim 10, wherein activation comprises activating
2 expression and/or activity of CCX CKR in a population of cells, whereby a tissue is formed.
- 1 16. The method of claim 15, wherein the population of cells are bone
2 marrow cells.
- 1 17. The method of claim 15, wherein the population of cells are
2 endothelial cells.
- 1 18. The method of claim 15, wherein the population of cells are heart cells
2 or cardiomyocytes.
- 1 19. The method of claim 15, further comprising transplanting the tissue to
2 a patient.
- 1 20. A method for treating a disease associated with cell proliferation,
2 comprising administering to a patient having or susceptible to the disease an agent that
3 inhibits the cell proliferative activity of CCX chemokine receptor (CCX CKR) or its
4 expression.
- 1 21. The method of claim 20, wherein the disease is leukemia.
- 1 22. The method of claim 20, wherein the disease is kidney or liver cancer.

1 23. The method of claim 20, wherein the disease is a brain tumor.